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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,649

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EXAMINER

NGUYEN, PHUNG HOANG JOSEPH

ART UNIT

PAPER NUMBER

2614

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,649	Applicant(s) PARASKEVAKOS ET AL.	
	Examiner PHUNG-HOANG J. NGUYEN	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-36 and 65-73 is/are rejected.
- 7) ☒ Claim(s) 11, 37-64 and 74-81 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/7/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1 and 78 are objected to for reciting "OCR" without proper description. The OCR must be descriptively spelled out, for at least, at first recitation in the claims.

Claim Rejections - 35 USC § 112

2. The following is a quotation of **the second paragraph of 35 U.S.C. 112**:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-64 and 66-81 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 2-64 and 66-81 frequently recite "such as". The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-10 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Crichlow (US Pub 2002/0018545):

As to claims 1, 12-13, Crichlow teaches a method of remote management of products and services (see Title and Abstract) which comprises the following steps and parts:

a. The creation of one communication centre (fig. 2) as a minimum that will be equipped with means for receiving and sending messages **(e-mail messages are transmitted back to individual e-mail accounts associated with each meter for individual customer billing via an internet connection 66, par. 0097)**, means for processing information and means for storing and handling information means for direct communication **(processor, see Abstract)**, means for processing and displaying consumption curves **(computer 40 of fig. 1. As appreciated by the ordinary skilled artisans, computer is capable of presenting information graphically)**, means for sending and receiving invoice settlement information, programs and means **(email system, par. 0101)** for the interruption and restoration **(fig. 13 describes the e-billing and method of e-payment. It is obvious to the ordinary skill in the art that customer's service will be disrupted if no payment is made to the utility providers within certain number of reminders sent out)** of the supply of users, programs and means for group communication, as well as means for radio **(par. 0027)** or wired communication **(label 70 of fig. 7, par. 0091)**.

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b. The installation of the following means in the already existing **(par. 0024)** consumption metering devices means **(par. 0024)** for recording mechanical or electrical or optical indications by the metering devices **(recording system which comprises an electronic meter reader, par. 0015)** with the help of a microprocessor **(See Abstract)**, that disposes of the means required for recognition of the meter indications **(signal indicative, par. 0018)** means for reading and transforming the pulses **(par. 0011)** that may be transmitted through power transfer **(par. 0011)** or radio **(par. 0027)**. The microprocessor also comprises means for optical meter reading, means for OCR digitization **(The meter reading module 32, sometimes called automatic meter readers in the industry, usually operate by optically counting the revolutions of the meter wheel, Par. 0093)**, and means for communication **(email messages, voice mail messages, text messages and/or telephone messages as shown in FIG. 13, par. 0101)**.

c. The installation of one special device (1) **(i.e., meter reading module 32)** as a minimum at the property of the consumer **(see fig. 2)**, that will comprise a microprocessor (132) **(i.e., microprocessor 62 of fig. 3)** equipped with appropriate software **(a program stored within the memory of the PC 40, par. 0095)**, that will dispose of means for receiving and processing the messages sent by the sensor (145) **(i.e., same as meter reading module 32)** means for processing and storing the messages (147) **(i.e., The read consumption amount is converted to a data signal and transmitted to the PC 40 for storage therein, par. 0121)**, means for communication (5) **(i.e., The system is**

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able to use the existing wiring in the customer location, existing telephone wires, a hard wire connection or wireless technology to carry the data signal from the meter to the customer PC, par. 0123) with the communication centres (15), (16) **(i.e., Utility company 36, par. 0122)** connection protocols through the Internet (133), (140), (141) **(i.e., Internet Service Provider 50)**, programs and connection protocols through wireless cellular telephony (17) **(see par. 0068, 0094-0095, 0129, 0123)** . It disposes of means for communication with one consumer as a minimum, means for the receipt of information (3) by the consumer, means of multiple communication with more than one consumers and means for multiple communication with different communication centres (15), (16).

c. The installation of one special device (1) **(i.e., remote data unit 14 of fig. 1)** as a minimum at the property of the consumer **(see fig. 1)**, that will comprise a microprocessor (132) **(see abstract)** equipped with appropriate software **(a program stored within the memory of the PC 40)**, that will dispose of means for receiving and processing the messages sent by the sensor (145) **(i.e., same as meter reading module 32)**, means for processing and storing the messages (147) **(i.e.,+ data signal transmitted to PC 40 for storage, par. 0121)**, means for communication (5) **(0122)** with the communication centres (15), (16) **(i.e., Utility company, par. 0121)** connection protocols through the Internet (133), (140), (141), programs and connection protocols through wireless cellular telephony (17). It disposes of means for communication with one consumer as a minimum **(par. 0030)**, means for the receipt of information (3)

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(customer PC 40 of fig. 3) by the consumer, means of multiple communication with more than one consumers and means for multiple communication with different communication centres (15), (16) **(par. 0030)**.

As to claims 2-7, Crichlow teaches the meter reading module is connected to one of an electrical, gas or water meter **(abstract)** and KWh meter **(par. 0040, 0095)**.

As to claims 8-10, Crichlow teaches the use of optical system to read the meter **(par. 0093)**.

As to claims 14-16, Crichlow teaches the use of internet **(Internet Service Provider 50 of fig. 2)**, mobile telephony **(i.e., wireless, par. 0123)**, simple telephone line **(par, 0123)**.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 17-36 are rejected under 35 U.S.C. 103(a) as being anticipated by Crichlow (US Pub 2002/0018545).**

As to claims 17-36, Crichlow does not explicitly teach customer receives information concerning the progress and development; customer settles the invoice; customer expresses his opinion; service provider may interrupt the

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service and product; service provider may reconnect; service provider may interrupt due to leaking of gas, or uncontrolled consumption or exploitation for financial gains, for anything reason concerning safety.

It is however obvious to the ordinary skilled artisan that the utility system is designed not just to provide the comfort and convenience for the consumers, but also to profit from the services. The system is intelligently software-executable system. It is not just capable of interrupting the consumers who unfairly abuse the service by not paying their due, it is also capable of providing safety by auto-shutting when there is leaking of gas or heat or electric or water that may be harmful to health and environment. Furthermore, it is also obvious that the provider would take advantage of the system to provide information related to the use of gas, water, heat and electric for the communication and education.

Therefore, it is obvious for the ordinary skilled artisans at the time of the invention was made to add the control in case of emergency or abuses and advertisement enhancement as well as educational awareness of the energy consumption into the service to better inform and service the consumer.

9. Claims 65-73 are rejected under 35 U.S.C. 103(a) as being anticipated by Crichlow (US Pub 2002/0018545) in view of Nap et al (US Pat 6, 246, 677).

As to claim 65, see claim 1, furthermore, Crichlow teaches means for bidirectional communication (5) (**par. i.e., interactive two-way communication, par. 0031**) with the central collection and processing unit (15) of the service and product providing agency.

Crichlow however does not teach means for sending alarms.

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Nap, who also teaches the meter reading communication system, discloses the use of alarm by an "interface management unit 22" (col. 2, line 55; col. 3, line 6; col. 4, line 8; col. 6, line 41; and throughout his invention) for the purpose of alerting the provide the condition and status of the meter system at the consumer's site.

Therefore, it would have been obvious to the ordinary skilled artisans at the time of the invention was made to incorporate the teaching of Nap into the teaching of Crichlow for the purpose of enhancing the monitor system and putting the system under constant watch of the service provider to prevent any potential damages or harm to health is there is a leaking of gas or heat. Simply, it is for the service providers to promptly take corrective action if there is an alarm report at sites.

As to claims 66-68, Crichlow, in view of Nap, teaches the use of internet **(Internet Service Provider 50 of fig. 2)**, mobile telephony **(i.e., wireless, par. 0123)**, simple telephone line **(par, 0123)**.

As to claims 69-73, Crichlow teaches the meter reading module is connected to one of an electrical, gas or water meter (abstract) and KWh meter **(par. 0040, 0095)**.

Allowable Subject Matter

10. Claims, 11, 37-64 and 74-81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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INQUIRY

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUNG-HOANG J. NGUYEN whose telephone number is (571)270-1949. The examiner can normally be reached on Monday to Thursday, 8:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571 272 7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CURTIS KUNTZ/
Supervisory Patent Examiner, Art Unit 2614

/Phung-Hoang J Nguyen/
Examiner, Art Unit 2614

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